



IOWA TELECOMMUNICATIONS AND TECHNOLOGY COMMISSION

Richard L. Bruner
CHAIR

Kathleen Kohorst
Kelly Dolan Lange

Timothy L. Lapointe
Mary Sellers

Mary Mosiman
Robert von Wolfradt

RIC LUMBARD, EXECUTIVE DIRECTOR

GOVERNOR TERRY E. BRANSTAD LIEUTENANT GOVERNOR KIM REYNOLDS

Iowa Telecommunications & Technology Commission

Grimes State Office Building, 1st Floor

400 E. 14th Street, Des Moines, IA 50319

January 19, 2017 Minutes

FINAL

To ensure the most efficient use of State resources, the January 19, 2017 ITTC meeting was held via telephonic conference pursuant to Iowa Code section 21.8. A telephonic conference also ensured more Commissioners were able to participate in the meeting and reduced the risk of delays caused by weather or other impediments to travel. The meeting was accessible to members of the public through attendance via Phone Bridge.

I. Roll Call:

- Commissioners Present:**

Richard Bruner, Chair (on-site)
Mary Sellers, Member (phone)
Kathleen Kohorst, Member (on-site)
Kelly Dolan Lange, Member (phone)
Mary Mosiman, Ex-Officio (on-site)
Timothy Lapointe, Member (phone)
Robert von Wolfradt, Ex-Officio (phone)

- Commissioners Absent:**

- Iowa Communications Network Staff Present:**

Ric Lumbard, Executive Director (video)
Phil Groner, Chief Operating Officer
Deb Evans, Chief Financial Officer
Randy Goddard, Business Services Bureau Manager
Ryan Mulhall, Security Bureau Manager
Scott Pappan, Engineering Bureau & BRIC Manager
Mike Cruise, Finance Bureau Manager
Dave Marley, NOC (Network Operations Center) Manager
Jessica Jensen, Executive Administrator
Lori Larsen, Communications Lead
TJ Boulet, Legislative Liaison
Karen Alessio, Secretary (Recorder/Minutes)

IOWA COMMUNICATIONS NETWORK

Grimes State Office Building, 400 E. 14th Street, Des Moines, IA 50319 Phone: 515-725-4692 Fax: 515-725-4727 www.icn.iowa.gov



IOWA TELECOMMUNICATIONS AND TECHNOLOGY COMMISSION

Richard L. Bruner
CHAIR

Kathleen Kohorst
Kelly Dolan Lange

Timothy L. Lapointe
Mary Sellers

Mary Mosiman
Robert von Wolfradt

RIC LUMBARD, EXECUTIVE DIRECTOR

GOVERNOR TERRY E. BRANSTAD LIEUTENANT GOVERNOR KIM REYNOLDS

- **Guests:**

Ray Warner, Aureon Networks
Carolyn Jennison, Speak PR

II. Call to Order

- Chair Bruner called the meeting to order at 10:30 a.m. It was noted that a quorum of members was present for the meeting.

III. Approval of December 21, 2016 Meeting Minutes

- Chair Bruner requested a motion to approve the December 21, 2016 meeting minutes. Commissioner Kohorst moved to approve the minutes. Commissioner Dolan Lange seconded the motion. The motion was passed unanimously.

Commissioner Kohorst – Yes
Commissioner Lange – Yes
Commissioner Lapointe – Yes
Commissioner Sellers – Yes
Commissioner Bruner – Yes

IV. Old Business:

- None

V. New Business

- **Financial Report – Mike Cruise**

The December Budget-to-Actual Lead Schedule for FY2016 was presented. Comparisons were made regarding the budget for the first six months ending December 31, 2016. Year-to-date Operating Margin is \$2.2 M, which is 6.8% above the total for budget. Year-to-date budget is \$2.3 M and under the operating margin by 6.8%. Equipment expenditures are reflecting the negative margin. Despite the

IOWA COMMUNICATIONS NETWORK



IOWA TELECOMMUNICATIONS AND TECHNOLOGY COMMISSION

Richard L. Bruner
CHAIR

Kathleen Kohorst
Kelly Dolan Lange

Timothy L. Lapointe
Mary Sellers

Mary Mosiman
Robert von Wolfradt

RIC LUMBARD, EXECUTIVE DIRECTOR

GOVERNOR TERRY E. BRANSTAD LIEUTENANT GOVERNOR KIM REYNOLDS

negative figures, ICN remains under budget. Next month the Budget-to-Lead Schedule will highlight MVS (Managed Voice Service) by determining margins on sub-cost centers.

- **2nd Quarter-Capital Expenditure Report – Deb Evans**

When the Bureau Chiefs present estimated timeframe of project completion, these projects are applied to the budget. If the projects are not completed within the estimated timeframe, the unspent capital remains in the budget, showing as a profit. Finance has begun transitioning to a margin-based reporting system which is categorized by individual services. This new method will be a more accurate means of tracking the planning and acknowledge the expenditures more clearly.

Four items have been added to the Capital Plan for the 2nd Quarter.

1. VMware & LAB Hardware - Budgeted \$550,000 invoiced at \$67,120. Missed percentage of 88%.
2. Core Replacement Layer 1 - Budgeted \$2M. Invoiced \$2,232M Missed percentage of 11.62%
3. Batteries/Rectifiers – Budgeted \$75,000 invoiced for \$35,000. Missed percentage of 53%.
4. UPS (Uninterruptible Power Supply) for MVS (Appropriation) – Budgeted for \$123,800 invoiced for \$6,667. Missed percentage of 94.61%.

Any revenue that is not spent during the Fiscal year will be utilized for emergencies or projects that need to be completed.

COMMENTS:

Chair Bruner: This new allocation method appears to be a more accurate system of tracking expenses. It will be easier to track where revenue is being spent and what is being deferred. I believe that this is a better process.

- **Core Upgrade – Phil Groner**

The following updates were presented regarding the Core Upgrade:

IOWA COMMUNICATIONS NETWORK



IOWA TELECOMMUNICATIONS AND TECHNOLOGY COMMISSION

Richard L. Bruner
CHAIR

Kathleen Kohorst
Kelly Dolan Lange

Timothy L. Lapointe
Mary Sellers

Mary Mosiman
Robert von Wolfradt

RIC LUMBARD, EXECUTIVE DIRECTOR

GOVERNOR TERRY E. BRANSTAD LIEUTENANT GOVERNOR KIM REYNOLDS

- 1st 100Gb core link between JFHQ (Joint Forces Headquarters) and the Lucas State Office Building turned up the week of January 16, 2016. Some links being 100Gb while others will be 200Gb. This can be dialed up or down depending on capacity demand.
- Ciena, vendor for Layer 1, will be in the office the first week of February to continue the deployment. Power review – remove legacy TDM (Time Division Multiplexing) and prepare for new core, savings to our customers providing power and HVAC (Heating, Ventilation, and Air Conditioning.)
- Preparing for next purchase. Assembling necessary PO for purchase of Layer 2/3 equipment. Will spend \$2.5M this quarter. Recall last quarter's purchase reflected in margin numbers since ICN used operating funds for that purchase. This next purchase will be made from previous year's upgrade appropriation dollars and will not reflect margin. ICN is using a mix of on-hand operating funds and upgrade appropriation dollars for the core.

COMMENTS:

Chair Bruner: Very exciting! So we have 100Gb between the ICN and JFHQ?

Phil Groner: Yes, the first link was 100Gb which can be easily turned up. There is a license cost to increase that to 200Gb, there are areas that will be turned up to 200Gb links.

Chair Bruner: Thank you. This is a good use of Operating funds.

- **Fiscal mid-Year Organizational Changes & Highlights – Director Lumbard**

The following ICN Organizational Changes were announced at the All Hands Meeting on January 5, 2017. The ICN Organization Chart is balanced with HRE as Span of Control is concerned. ICN's Operations Bureau will be split into BRIC (Broadband Information Center) Operations and NOC (Network Operations Center) Operations. NOC Operations will be managed by David Marley, and will remain under the CAO (Chief Administration Officer). Engineering Bureau Chief, Scott Pappan, will be the Acting BRIC Operations Bureau Chief until a replacement is named. BRIC Operations has been moved under the Chief Operating Officer. ICN's Contracting and Security Bureau moved under the CAO.

- **Mid-Fiscal Year Report Card – Director Lumbard**

IOWA COMMUNICATIONS NETWORK



IOWA TELECOMMUNICATIONS AND TECHNOLOGY COMMISSION

Richard L. Bruner
CHAIR

Kathleen Kohorst
Kelly Dolan Lange

Timothy L. Lapointe
Mary Sellers

Mary Mosiman
Robert von Wolfradt

RIC LUMBARD, EXECUTIVE DIRECTOR

GOVERNOR TERRY E. BRANSTAD LIEUTENANT GOVERNOR KIM REYNOLDS

January 2017 was the first review of the goals that were set in July of 2016. This year 12 goals were established; two for each bureau and two Agency Wide. Goals are measured on the continuum from Stuck to Peak state. Every process of the ICN is measured by two indicators; a KPI (Key Performance Indicator) which is a gauge of indication or the scale at the bottom of the Report Card. The indicators listed on the bottom of the Report Card are: Stuck, Vision, Direction, Movement, Traction, Acceleration, Momentum, and Peak State. On the right-hand side of the column, the scores are totaled and that measures the progress that has been made over the last 180 days. This indicates not only how well the agency is doing but how each goal is progressing.

COMMENTS:

Commissioner Kohorst: Do you use the Management Team to score the Report Card?

Director Lumbard: Yes. The Leadership Team meets together to analyze and provide input regarding each bureau's goals. The Report Card is agreed upon prior to presenting the information at the Mid-Year Flip.

- **Managed Video Service – Director Lumbard**

The ICN has virtualized many major pieces of the video platform and is ahead of schedule to sunset the MPEG Legacy videos. The 200Gb is Phase A of the core upgrade of the Layer 1, 2, and 3 networks and is moving to a flexible SDN (Software Defined Network) and NFP (Network Function Virtualization) system. The ICN is very close in determining a clear strategic decision for the future of the SDN. This is vital in the Telecommunications Industry, as it is expected by 2018 that 70 percent of all central offices will be operating on virtualized platforms. The ICN will continue to provide the foremost, fastest and most flexible services to our customers.

Currently, the pace of the ICN has increased in order to complete necessary projects. There is a progressive momentum in the areas that require assertive movement and as a result it has been an incredible year of progress.

COMMENTS:

Chair Bruner: Kelly Dolan-Lang and I were at the All Hands Meeting. The changes being made are very exciting and very progressive. I would recommend taking the time to review the video. I believe from lay persons stand point that the Telecommunications Industry both wire line and wireless is moving from

IOWA COMMUNICATIONS NETWORK



IOWA TELECOMMUNICATIONS AND TECHNOLOGY COMMISSION

Richard L. Bruner
CHAIR

Kathleen Kohorst
Kelly Dolan Lange

Timothy L. Lapointe
Mary Sellers

Mary Mosiman
Robert von Wolfradt

RIC LUMBARD, EXECUTIVE DIRECTOR

GOVERNOR TERRY E. BRANSTAD LIEUTENANT GOVERNOR KIM REYNOLDS

hardware to software. Another way to look at is from a central office to a data center. This is a big change for our industry and I think everyone involved is grappling on how to incorporate the changes, however, I believe the ICN is on the cutting edge.

- **HRE Audit – Director Lumbard**

The ICN recently completed an HRE (Human Resources Enterprise) Lead Worker Audit. The Department of Management requested clarification from the ICN regarding the expansion of duties. All Bureaus within the ICN had classification reviews. This was not a performance audit where performance is taken into consideration of an employee. This audit was a comparison of the evolution of duties versus what the job classification through HRE. In some instances the audit changed the optic for an employee to no longer remain on the management team and for others to be classified in a different position. Those adjustments took place in about 90 to 120 days.

The Position Audit identified the positions that have evolved significantly. The positions that were audited were Executive Officer 1, Technical Service Specialist, Accountant 2, Accountant Tech 2, Executive Officer 2, and all of the Telecom Administrator positions, which include Bureau Chiefs. Several positions have resulted in reclassification recommendations by HRE and those have been taken into account and changes are being made as recommended.

- **Internet Transit & Peering Capacity Report – Scott Pappan**

The ICN is building redundancy and resilience into the network. In order to protect the integrity and production of the Network, ICN has established carrier and route diversity. This has been accomplished through Transit and Peering agreements. Internet transit is the service of allowing network traffic to pass between public networks. The question arises; financially what is best for the ICN and the State of Iowa as Transit is more costly than Peering. Peering takes IP traffic and hands it off directly to the content provider. Netflix and Google make up over 50% of ICN's traffic; ICN is able to hand off this traffic with our peering arrangements.

Traffic is handed off daily from Network to Network on the main locations listed in the 'ICN Internet Transit and Peering Connections' chart as it never utilizes the public Internet.

IOWA COMMUNICATIONS NETWORK



IOWA TELECOMMUNICATIONS AND TECHNOLOGY COMMISSION

Richard L. Bruner
CHAIR

Kathleen Kohorst
Kelly Dolan Lange

Timothy L. Lapointe
Mary Sellers

Mary Mosiman
Robert von Wolfradt

RIC LUMBARD, EXECUTIVE DIRECTOR

GOVERNOR TERRY E. BRANSTAD LIEUTENANT GOVERNOR KIM REYNOLDS

Internet-Transit: Actual Transit Suppliers. The numbers on the side of the suppliers is the size of the connections ICN currently has.

Peer Descriptions-All the Peer Description with the exception of Aureon, CenturyLink, & Mediacom are 10Gb connections that are handed off. By doing this the ICN becomes more efficient, faster, and cost effective to operate.

ICN Internet Transit and Peering Connections

Locations	Transport	Internet-Transit	Peer Descriptions
			(Top Peers)
Denver-Core Site (Any2)	20gb	Windstream -10gb	Google, Akamai, Amazon, Facebook, Dropbox, Netflix
Dallas-Equinix (XI)	20gb	Tata Comm.-10gb	Google, Micosoft, Apple, TDS,Yahoo, South Dakota, & Verizon
Ames-Iowa State University	10gb	Hurricane Electric-10gb	Internet 2, Level 3, Wiscnet, Google, Amazon, Apple, Microsoft.
Iowa City – University of Iowa	10gb	TeliaNet-20gb	Internet 2, Wiscnet, Indiana University, Google, Amazon, Apple, Microsoft.
LightEdge – Des Moines	10gb	N/A	LightEdge
Aureon-Cedar Rapids	1gb	N/A	Aureon (INS)*
MidiaCom – Des Moines and Cedar Rapids	2gb*	N/A	MediaCom*
CenturyLink – Des Moines	600mb*	N/A	CenturyLink*

TOTAL BANDWIDTH:

TRANSPORT: Total transport purchased and installed to manage Internet traffic - 83.6gb

INTERNET Transit: The traditional Internet - 60gb

INTERNET Peering: Peering is the exchange of traffic between two networks for mutual benefit. Networks use peering to increase the performance of their service & reduce their connectivity cost - 132.6gb

IOWA COMMUNICATIONS NETWORK

Grimes State Office Building, 400 E. 14th Street, Des Moines, IA 50319 Phone: 515-725-4692 Fax: 515-725-4727 www.icn.iowa.gov



IOWA TELECOMMUNICATIONS AND TECHNOLOGY COMMISSION

Richard L. Bruner
CHAIR

Kathleen Kohorst
Kelly Dolan Lange

Timothy L. Lapointe
Mary Sellers

Mary Mosiman
Robert von Wolfradt

RIC LUMBARD, EXECUTIVE DIRECTOR

GOVERNOR TERRY E. BRANSTAD LIEUTENANT GOVERNOR KIM REYNOLDS

- **WISE Schools Pilot – Law Enforcement Impact – Phil Groner**

Wi-Fi Internet for School Emergencies (WISE) is a joint pilot project with the Department of Public Safety; Marshalltown High School, Norwalk High School, Martensdale High School, Cisco-Meraki; wireless providers Aruba, Fortinet; and the ICN. Allows first responders to connect to a dedicated, private, secure Wi-Fi connection at a school location and access law enforcement's critical applications via ICN broadband services.

Prior to the WISE Pilot: The Iowa State Patrol has several posts around the State, one post being located in Des Moines. Post 1 serves an eight county region; many of the troopers who serve in Post 1 do not live in the Des Moines area. A trooper, who lives in Marshalltown, was required daily to drive from his home in Marshalltown to Post 1 in Des Moines to off load his dash cam and in-vehicle video. During each shift, information is recorded when lights and siren are activated, this information is required to be downloaded into the system. The trooper was driving over 100 miles per day, spending 2 hours of drive time and 1 hour of download time.

With Wise Pilot: The trooper goes to the Marshalltown High School, (about 15 minutes of drive time) and downloads his dash cam video in about 7 minutes.

WISE potential – saving approximately 3 hours/day for some Troopers.

This pilot continues the ICN's efforts to repurpose Part 3 locations. Schools receive the added benefit of increased security, while Public Safety is benefiting by adding capabilities that can save time, resources, and money while improving public safety in Iowa.

COMMENTS:

Chair Bruner: This just scratches the surface as I am sure there are a lot of different applications that will evolve as people realize the capabilities. I like the fact that it protects our Part 3 locations which is very important to the ICN.

Mary Mosiman: Is there an additional cost to the schools?

Phil Groner: There is no additional cost to the schools or DPS (Department of Public Safety) involved with the Pilot Project other than resource time. There are Technicians from the schools and staff from the DPS who are working on this in conjunction with the ICN. The equipment was donated by providers and equipment manufacturers.

IOWA COMMUNICATIONS NETWORK



IOWA TELECOMMUNICATIONS AND TECHNOLOGY COMMISSION

Richard L. Bruner
CHAIR

Kathleen Kohorst
Kelly Dolan Lange

Timothy L. Lapointe
Mary Sellers

Mary Mosiman
Robert von Wolfradt

RIC LUMBARD, EXECUTIVE DIRECTOR

GOVERNOR TERRY E. BRANSTAD LIEUTENANT GOVERNOR KIM REYNOLDS

Chair Bruner: That is an excellent example of how the ICN can provide additional capabilities to the schools.

VI. Other Business – Commission and Staff

- **SYBAC – Phil Groner**

Statewide Youth Broadband Advisory Council

Meet and Greet at the Capitol with Iowa Legislators

Tuesday, February 14, 2017

10:30 – 11:30 AM, Meet one-on-one with SYBAC students

Iowa State Capitol, Room 304

Student Panel Discussion: Students' Perspective on Technology and Broadband

Tuesday, February 14, 2017, 2:00 – 3:00 PM

Grimes State Office Building, Conference Room: B100

This event is open to the public

COMMENTS:

Chair Bruner: These kids are providing a lot of new and useful information.

Commissioner Mosiman: I attended the event last year and the ideas from these young students are amazing. It was eye opening.

VII. Adjournment

Commissioner Kohorst moved that the meeting be adjourned. The ITTC meeting adjourned at 11:31 a.m.

IOWA COMMUNICATIONS NETWORK

Grimes State Office Building, 400 E. 14th Street, Des Moines, IA 50319 Phone: 515-725-4692 Fax: 515-725-4727 www.icn.iowa.gov



IOWA TELECOMMUNICATIONS AND TECHNOLOGY COMMISSION

Richard L. Bruner
CHAIR

Kathleen Kohorst
Kelly Dolan Lange

Timothy L. Lapointe
Mary Sellers

Mary Mosiman
Robert von Wolfradt

RIC LUMBARD, EXECUTIVE DIRECTOR

GOVERNOR TERRY E. BRANSTAD LIEUTENANT GOVERNOR KIM REYNOLDS

ATTESTED TO:

Richard Bruner, Chair, Iowa Telecommunications and Technology Commission

IOWA COMMUNICATIONS NETWORK

Grimes State Office Building, 400 E. 14th Street, Des Moines, IA 50319 Phone: 515-725-4692 Fax: 515-725-4727 www.icn.iowa.gov